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Transcript of Interview with Andrew J. Senti

Conducted by Jim Muhn

August 31, 1992, September 3, 1992, July 23, 1993

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INTERVIEW WITH ANDY SENTI

Three-part interview with Andy Senti, Realty Specialist of the Bureau of Land Management (BLM) Colorado State Office. Interviews were conducted by Jim Muhn, Land Law Historian of the BLM Denver Service Center, and recorded on August 31, 1992, September 3, 1992, and July 23, 1993.

This is Jim Muhn, the Historian at the Denver Service Center for the Bureau of Land Management. And I'm speaking with Andy Senti who works at the Colorado State Office in Lakewood, Colorado. The date is August 31, 1992.

Andy, would you just give us a brief biographical sketch of yourself and your career with the Bureau of Land Management?

ANDY: Well, I was born in 1925 in Durango, Colorado. My parents were both had homesteaded a short time before. My dad in 1916 and my mother about 1920 before they were married. I grew up on the homestead and I guess that has been a very important factor in my career with the Bureau because I learned the land ethic and something about townships, ranges, and that type of information at a very early age. So that it became, when I got into the Bureau of Land Management, it became a native intelligence item that is very functional for the type of work that the Bureau of Land Management does. I was educated in a very small, close school of one of almost the vanishing, even at that time, in the 30's and I think one year our peak performance, we had 9 students for part of one fall. But mostly, it was around 5 or 6 students. I was by myself in a grade all the way through the first 8 grades. So, that I was able to get a great amount of individual attention from the teachers. And that was probably a high, very advantageous for me over the long pull to have had that individual attention.

JIM: Now did you go to college?

ANDY: Yes, I went from our local little grade school, which was only about a mile or less, almost a mile from our house. Then I had to go to high school, I had to go to a place called Marvel, which is about 7 miles away and there I stayed with a family and

helped do the janitorial work in the school building. That was for 2 years and then that school was discontinued. Then I had to go to Durango, Colorado, for my remaining junior and senior years in high school. And, there I didn't work much in the extracurricular activities because I had a job, an evening job and Saturday job with a feed and seed sales place and I, so I got acquainted with ranchers there coming in to buy hay or sell hay or buy or sell grain, or things like that, unloading railroad cars off the Denver Rio Grande Narrow Gauge that came from {_____} across{ **Cumbradge Pass} and into Durango. So, I got a little acquainted with the outside world in that respect of dealing, seeing this feed stuff come in from Purina feed manufacturer and the oilcake and things like that the ranchers came into to buy. We also had a local clientele of people who bought small lots of grain to feed their, in town in some of the outlying quarters of the small town, and they bought, they would buy 10 pounds or 100 pounds of grain or rolled oats or something to feed their goats or their chickens or things like that. So, by that time I was old enough to drive a vehicle so I could deliver those and take their money from them when I delivered the material and make change and those kinds of things, so I got a little exposure to the business world in that respect. Some of the clients probably were using the grain to manufacture alcohol. So, they would buy perhaps larger quantities that seemed really necessary to run a small group of chickens. So, we were always suspicious, at least, of those. Also, got to make trips in the outlying ranches to pick up baled hay cause we had quite a market for baled hay in the feed store. And I got to assemble grain storage bins as the old circular galvanized steel storage bins and learned how to do that kind of work. And, I guess, that was good education for me cause I decided I didn't want to do that for the rest of my life. So, I was going on to college anyway, but it was impetus to go there sooner. So, I did.

JIM: Where did you go to school, college?

ANDY: At college, I went to Fort Lewis, the old campus of the Fort Lewis A&M College out at Hesperus, Colorado. It had been developed from an old Indian fort that had started, I suppose, back in the early 1900's or perhaps earlier and then had been, when the problem of the Indians terminated, then it had been converted to a school or sorts and finally to a junior or I

guess a junior college. At least it was a subordinate college of Colorado A&M College at the time I was there. And the relationships between the two campuses were not all that great. So, I was majoring in forestry for lack of a more definitive term, and I was accepted at Fort Collins at the Colorado State University. And I was also accepted at the Utah State University in Logan, Utah. And I made one of, probably the wiser decision in my life was going to Utah State because some of the problems between the Fort Lewis and Fort Collins administration and also there was a plethora of foresters and that type of people available at about that time. So, they were using the old bell curve to weed out the ones that weren't too good. So, I went, I probably would have gone down the tube at Fort Collins. And Utah State was a very good school for me to go with. We had our summer forestry, range wildlife session in the mountains and spent all summer there and so I had a good introduction to much of the stuff that I've later learned or later did in the Bureau of Land Management where the education I got from the summer school was probably more productive than the textbook education that I got later. At Utah State, I worked, or I went to finish my the last 2 years there; I had gone 2 years to Fort Lewis College and then I finished my junior and senior years at Utah State. And I came to work with the Forest Service as a temp, seasonal or temporary on Grande Mesa National Forest and spent the summer, entire summer, at Muddy Creek Ranger Station doing a variety of things that beginning range conservationists do in the way of fixing fences and counting cows on and off the range and shooting groundhogs for a pastime, that type of work and then there wasn't any job opportunities of a permanent nature or probably temporary had I explored them when that job ended. So, I went back to Utah State for another full year of just post graduate work. I didn't try to go for my Master's Degree or anything. But I did take a lot of additional courses that had I not been able to schedule into my curriculum in my undergraduate work and those proved to be good investments over time {**garbled**} probably better than this degree would have been for me. Then from there I went. When that ended in June of 1951, I went, I had a temporary job with the Forest Service at {**Sieranca??**} Experimental Forest north of Globe, Arizona. And there we were working with hydrologic studies basically doing studies with infiltrometers in a variety of vegetation zones from spruce fir on down into the raw desert down at Roosevelt Dam. And that proved to be a very good summer's work there. That job terminated in September probably of 1951 and I had made application to the Bureau of Land

Management having little idea who they were. I think Bob Nielson was in the Utah State Office. I don't think he was State Director at the time. He was probably in planning or something. But he came through and talked to us when we were still in Utah State University. And I got, that was about my exposure to the Bureau of Land Management until I, of course had filed an application with them. But then, then they gave me an offer of a job to start in October when I got through with the {**Sieranca??**} and so I came to Salt Lake City when we still had the Regional Offices that were created by the Bureau of Land Management on the Taylor Grazing Service, the General Land Office, and the Division of Field Investigations were combined in 1946. The work that we started to do, I had no idea that we would be coming to Colorado, but the work that we were slated to do had to do with inventory, resource inventory of the Arkansas White and Red River Basin in Colorado and Oklahoma and through there. My work was confined entirely to Colorado and entirely to the Arkansas River. We were, I didn't get to work until I think this was the 8th of October of 1951. And I spent a few days in Salt Lake City with the Lands group there reading old land reports for homesteads and public sales and that type of thing. That was my introduction and training to being a land examiner. And, of course, none of it stuck very well 'til I got out and used it in practical application.

JIM: Why were you reading those reports? Just to get an idea of what the country was like?

ANDY: No, this was just to see what realities, or I was a range con, range conservationist, then but we were doing lands work and I guess they had envisioned that we would be doing land reports for homestead applications and public sales and things like that.

JIM: So, this was just to see?

ANDY: Just to show me this is the way the big boys do it and so it, and of course, then we, I went, I reported into Canon City, Bureau of Land Management District Office, there and we were kind of, we belonged still to Salt Lake City as a Regional Office, but we were kind of headquartered in Canon City. And we

went, started out, I started out with the team. There had been a team that had been working all summer long comprised of people that had been with the Bureau for a season or perhaps a year or two that were familiar with.

JIM: Well, were these teams multi-disciplinary?

ANDY: Yes, they worked everything. We were working with inventory of soils and vegetation and carrying capacity and that type of thing. It was. We didn't, none of us knew much about the rectangular survey system or anything though we did make some effort to find a few of the survey corners, but relatively few. And so, our main emphasis was getting the type lines drawn on aerial photography and getting it annotated and doing the analysis of the or the inventory of the vegetation that was there for silkbrush or aspen or sagebrush whatever was there and the associated shrubs and forbs and grasses.

JIM: So, wasn't this all this basis that you working on? The first big planning effort by the Bureau, isn't it?

ANDY: Yeah, well, in a sense yes. We were, I think the Missouri River Basin had started somewhat earlier than what we had. So, we were, had an interesting work with that. We started at Cripple Creek, and this was October 8th, and we didn't last too long there before the snows came and got pretty and wasn't practical to go continue doing the field work because we couldn't identify any vegetation within any degree of accuracy than estimate ground density and things like that. So, we. And then Abijah Cook who had started about the same time as I did. He and I went off into southeastern Colorado in to {**Burfino**} and Las Animas counties to look at isolated tracts of public land of which there were and are still a lot of those that have never been disposed of from Federal ownership. And we looked at those. They were not in applications or anything. We were simply identifying them and writing down the vegetation and soils and all that kind of information and estimating what the value of the land was in terms of fair market value. Neither of us with any training in appraisal work or anything like that so we were not, our dollar values might have been fairly good, but they were not very substantive by anything that we had knowledge

of. It was pretty much a running board estimate of values gauged a little by talking to ranchers who, of course, didn't think the land was worth very much cause they were probably thought well, maybe we get to buy that, and we don't want to tell them that it's very valuable. So, we worked around in that, in those counties until the weather got more or less intolerable for us, probably after Thanksgiving. And then we went back to Headquarters at Salt Lake City and spent the until the next, probably the end of March of 1952 in writing up the inventory information we had gathered the previous year or that crews gathered the previous years and reducing it to maps and then getting it to the draftsmen to make the plates ready for printing, eventually could print these vegetation types and soil types and land use capability types that were, that we were inventorying. And we run out of money about the beginning of the third quarter of the school year up at Utah State University so I said, well I'd like to go back for 3 months if I can come back and work after the first of July when the money comes back again. We were on a July-to-July fiscal year, of course, then. So, I went up to Utah State and took some more courses that I wanted or needed. And then started back again, I think this time I was by myself, I guess, out in southeastern Colorado and I looked at a lot of tracts. I just camped out wherever nightfall overtook me. Had an old 1942 chevy 2-door sedan that was probably the last one that the General Land Office was able to buy before World War II set in. And it was a good vehicle, so I'd load up some groceries and I'd go out and I'd come back and go to this Soil Conservation Service and look at the aerial photographs of the territory I'd been in and mapped out the tracts of land that I'd looked at or thought I looked at. I didn't always, I wasn't always able to identify them accurately because our best map that we could come up with was a state highway map on a county basis that had all the land net in it{**_____**} in sections but the, it was probably a lot of it was built from the General Land Office's rectangular survey system plats and they were not too swift on the interiors of the sections as to the location of roads or things like that so the, consequently the county maps that we were using were not particularly good. You couldn't go by a road and say well that goes right through the tract I want to look at. It might go within a mile of it if you were lucky and then it became your responsibility to guess that the real tract is over here, not by this map but by being on the ground. It's over thus and so direction and you went back and kind of verified that from the Soil Conservation Service aerial photographs if you had been

somewhere near it at least. And then we finished. I didn't finish that work. We just, we got more money so that there could be some more crew hired, I guess, or rehired. And we came back and worked throughout the Canon City District of the Bureau of Land Management for all of that summer of 1952. And we camped at old abandoned farmsteads primarily. They would be fairly tolerable houses left and we just, we asked the owner if we could find him if we could live in there for 2 weeks while we were working this locality. And then we would move on, and the crew leader would go out and find somebody else's house was available and we'd move our camp over there and stay there for a while until we worked out that area. So, we didn't have a lot of traveling to do. We could be on the job pretty quickly.

When we finished our inventory field season, as it were, in 1952 then Abijah Cook and I went out and worked in the...

JIM: How do you spell his first name?

ANDY: Abijah, [A B I J A H]

JIM: And is that Cook, C O O K?

ANDY: Yes.

JIM: Okay.

ANDY: And Abijah and I went out and worked some more in {**Warfino**} and Los Animas counties. And then we came back to Salt Lake City and worked again at the compilation of the information that we had gathered in the previous field season. And I guess at about that time, maybe perhaps the next year, I'd have to look in the diary to find out, but we, after we got through with the compilation and the field opened up again, then we came back into the Arkansas White Red River Basin and finished that up. We worked in Custer County up at Silver Cliff and down in the little part of {**Orofino**} County that we had not previously gotten into, then worked all of the length of the Arkansas River from Salida northerly to Leadville, Colorado.

That finished our work of inventory with the Arkansas White Red River Basin. Then we gathered up our belongings and went to finish up work in the North Platte River Basin that had not been accomplished in Colorado. This amounted to just a tiny up on the Laramie River and Bull Mountain. We were up there just a very few days working that area to gather the same type of information that we had gathered for the Arkansas White Red River Basin study. And when we got finished with that, then Abijah and I went into southwestern Colorado and the Bureau had accumulated a huge backlog of applications for homesteads and public sales and that type of request from the general public to enter the public lands as homesteads or to buy them or things like that. So, Abijah and I worked at that for the rest of the open field season of going and examining individual tracts of land. And there were a lot of homestead applications from that were still carried over from post-World War II days and a great many of these applications were from folks in Texas who had thought they could come up to Colorado and get some homestead land be happy forever after. And, so we had the `{**oobiekoodis**}`[ubiquitous?] task of finding that most of these lands were not, in our estimate, suitable for homesteading. They were marginal lands at best for crop production because they were ... while they were very good lands in the Dove Creek/Cortez area for agricultural crop productions, what was left over after the exposure of these lands to settlement after crops 1910 onwards were just remnant pieces of land that bordered on sheer canyon walls or things like that so that you had a very, a feathering effect if you will of the soil depth. It may look good on a portion of a parcel of land that a person had applied to homestead but as you looked over it, then it feathered out to just a very thin if any `{**mample**}`[sample?] of soil overlying the sandstone that underlies, the Dakota sandstone, that underlies the area.

So, in the process of doing this intensive field investigation, then we got experience with what is an economic unit for an agricultural production in this area. Is it 640 acres or 2,000 acres or what's going size out in private ownership. We got experience dealing with precipitation charts, things like that that helped us identify the past historical precipitation and what it would be, probably be, projected in the future and what would be in the particular land that we were working with because you were dealing with maybe 15-inch rainfall which is just marginal for agricultural production in that area. And so, we were dealing with areas as the lower, as the elevation

decreased as the mesas sloped off to the southwest, the, of course, the precipitation became less, the soils were less absorbent of what precipitation did fall and so you got into a situation that was not good for long-term agricultural development. And then you had the added factor of early or late spring frosts and early fall frosts where they had great capability to wipe out agricultural crops. The principal one that was grown in the area was that was vulnerable to this was the pinto bean which is still grown in large quantities in that area. In most of the land that we looked at, there was still public land. We had those three factors of precipitation, growing season, and soil quality that we usually wound up not recommending favorably for any homesteads. And indeed, I don't think we allowed even more than one or two out of all the ones that we looked at. They simply went by the board because of these climatical factors and soil factors that we had analyzed. And we also did, there were, of course, some existing homestead entries that had not gone to final proof yet so we would work those into our schedule to go look to see if the entrymen had done his requisite cultivation, whether he had established his residence and maintained it as required by the law. And so that gave us exposure to that type of work and..

JIM: Did most of them prove up or?

ANDY: Yes, there were only a few and we probably were lenient with those in terms of their cultivation. If they'd made an honest effort to prove up and do some work with the land, we were probably inclined to recommend favorably. And, of course, that was nice work for me because I had grown up on a homestead that was not very different from these that we were looking at. So, I don't think I had a bias toward the homesteader, certainly the ones we contested didn't think I did. And, but it was a good gauge for me to be able to use my experience with growing up on a homestead to say well, this guy is a phony, he hasn't cultivated, he hasn't lived there, he hasn't done this or that and so I was inclined to be somewhat harsh with my recommendations if I ran into a situation like that. And then we would follow through with the contest and he could tell the administrative law judge or the equivalent of how good a farmer he was and that. And somebody made the decision that he either got his homestead or didn't. So that was part of the native intelligence that I was able to bring into the work that. If I

had been flat out of New York City or somewhere I would not have had an inkling of that type of background.

JIM: Now, we've kind of crossed the threshold here in terms of the fact that you've gone from - started with one administration, Truman as President and {BIG NOISE} as Director of the Bureau. And then we go and now you're crossing over into Eisenhower and now Woosley is coming in, just one, some questions on that is one. What was your perception of Clawson when he was Director?

ANDY: I never did, I don't think I ever met him, but and, of course, the whole Bureau was still new to itself and to me because that was just 1954, let's say 54 or thereabouts so it was new, and I didn't have any interchange in that type of area. But I regarded him, I think in college we had been exposed to some of his work and so we had some perception of what he was about and the resources for the future was a good catch title for what he was about, and he seemed to. He was, I guess he was the first Director that came out that got a little bit away from the way that the General Land Office had done things. He had to make that break away from the philosophy of disposal of the public lands and bring it gradually over into a philosophy of management of the public lands and how do you go about doing that which was not entirely new to our people in the. Many of the ones that were in the administrative positions in the resources positions that type of folks had had experience with the Forest Service, so they'd been for the most part had been in college in for however much resource management was taught in the colleges when they were there. It impacted them so they were thinking in terms of resources even though maybe the bulk of the people didn't have that background to work with that these. A lot of the folks had that. They, we had quite a few people who had worked with the, perhaps some, of the Soil Conservation Service and some, of course, came in with the Civilian Conservation Corps, a number of the people that I worked with had come into the Civilian Conservation Corps and learned how to do, how to build gabion dams and that kind of range rehabilitation work and livestock water facilities, that type of thing. And they brought with them into the Bureau knowledge, technical knowledge and land ethic that fit in with what Clawson thought his mission was with the Bureau of Land Management, I believe.

JIM: And did you see, you know, when Woosley and his Republicans come in did you notice, was it perceptible to see the change in philosophy?

ANDY: I don't think I detected that. I was too naive in my dealings to understand that I think. But it was there. But I wasn't bright enough to detect it I don't think.

JIM: Okay. That's fine. Let's go on for the next few minutes that we've got at least on this side of the tape.

ANDY: Okay.

JIM: And then I've got to get ready for my other meeting. Well, where were we. You were in southwestern Colorado.

ANDY: Yeah, when we finished pretty much looking at most of the pending applications for these various authorizations or homesteads or sales or whatever. Then we came back to Salt Lake City, and I spent just a little time in Price, I think out of the Price District in Utah. There was some state {**demnistry**} sections it seemed like and maybe a couple of homesteads and things like that we needed to look at. Then we stayed for the entire winter. And that gets us up into about 1953, I guess. And we finished, when we finished our compilations and so forth then I think Abijah went out and worked land cases again. And I spent sometime with the Utah State Land Board. They had still had a lot of state exchanges to work out on the Navajo Indian Reservation and so one of their employees and I went down and looked at a lot of school sections on the south side of the San Juan River in the Navajo Indian Reservation and stayed a couple of nights at the Goulding's Trading Post and probably camped out a couple of nights and went down to farms on the San Juan River which is northwesterly from the trading post and generally wandered around out there so we had some idea of values of location and quantity and quality of the remaining school lands. And I came back to Salt Lake and then I went out for a while and along the, in the Vernal area in the Green River, and looked at some desert land applications which I had

never, had not worked with in the past. And so, I got a little broadened exposure there. And then I'll have to skip the rest of 1953. I don't remember precisely what we were doing then but when we got over into 1954, then we came into the reorganization of the Bureau of Land Management from its Regional Offices of which Salt Lake was one with Utah and Colorado and its supervision over to the State Offices that were begun in 1954. And I came, I joined a number of other transferees from other BLM regions, and we set up the Colorado State Office of the Bureau of Land Management beginning July 1 of 1954. And we had just a very skeleton crew there and we built almost continuously on that because of the diversity of resources that we eventually come to manage and the technical skills that we need to do that. When we were first starting, when we were looking at homesteads or public sales or things where the realty specialist, range conservation, whatever his title, he did the whole thing pretty much. And if he didn't know anything at all about archeology and there was substantial archeological values there, he may miss those entirely. There was timber and he hadn't had any training in measuring timber and things like that, he might let some pretty choice timber get through a sale without getting dollar value back from it. So, but basically, these realty types that we had working then had in contrast to most of the folks that we have now, they had come from western backgrounds, they had come from ranches or farms, they had been through fairly rigorous sessions at the colleges like Utah State University or Colorado State University, so that they had either naturally by education they had a conservation ethic and a lands background training in that they had been exposed in their transporting through the college, had been exposed to geology and surveying, a whole lot of natural sciences that made them fairly well rounded individuals. So, most of them could at least recognize some significant value that was in that particular land. And then they might have to call on the National Park Service for archeological investigation or maybe perhaps some other specialty if there was something out there that they didn't know about.

JIM: How many people were in the State Office when you first began?

ANDY: When we first started the Colorado State Office, we had a, probably three or four people in administration and not more

than three or four people, perhaps five, in the what we would call or term resources. We had a range specialist and a forester and maybe watershed or soils or something like that. And then in the lands and minerals work that I worked with, we had, we hired several realty specialists types. They maybe called range conservationists or something like that. But we were doing, we were out of the river basin investigation. We were doing strictly investigations or examinations of lands that were in the public sales, homesteads, desert land entries. And then we got in a new facet. Rather quickly there, the Small Tract Act of 1938 had not been used hardly at all up through World War II and even into the very 50's but by 1954, the word had kind of gotten around that you could get these small tract homesites from the Federal Government and then there was quite an impetus on the part of the Federal Government, Bureau of Land Management, to make these lands available for small tracts. So, we were under some duress to find sights that could be laid out in 5-acre tracts or 2-1/2-acre tracts or whatever. And be suitable for homestead types. And these were basically, at least in my approach to it, these were season home sights, they weren't ones that we really expected people to use year around. So, the whole philosophy built around that seasonal-type use, and we got into, hindsight shows, that we got into a lot of trouble with this because the land use in the area and a good area to think about is around the Old Town of Dillon which is now the new town of Silverthorne and Dillon over west of Denver. We had a very, very nice mountain sight there, mostly timbered, or open with a little sagebrush and aspen trees, things like that. Well, by the standards that we were going by at the time, seasonal-type use, that was great. That was a wonderful place to have a second place to go out in the summertime. But the fallacy of that was that the land use changed with the incoming of the ski areas and development like that, the development of the Dillon Reservoir for Denver's water supply. All of that changed that land use from a seasonal-type thing to year around. And, of course, our parcels were not set up for that at all. They were set up to, you weren't anticipating having to plow snow, so we made narrow rights-of-way, maybe 20, well at the outside they were probably 25 or 30 feet wide. Well, then the county, later the county came crying to use, well you didn't reserve enough width of right-of-way there for us to plow snow on these tracts or to these tracts. And now these people are yakking to use cause they want less to maintain an all-season route to their cabin site. They want to come and use it in the wintertime too cause they want to go skiing and things like

that. And so we had. The only thing that saved us there, we didn't get many of these done. We didn't, I think basically down deep in our locally, we weren't too attuned to that small tract homesite, the proliferation of that and so we either dragged our feet or else we didn't have lands that were really highly suitable for that. But we did get some really nice developments, Grand Junction, we had a nice desert-type layout there that worked out very nicely. Even with our north, south, east, west layout of lands in a more sophisticated design would have been in irregular shapes and things to accommodate terrain or roads or cliffs or things like that. We got a nice development at South Fork and in Rio Grande County where it had been an old forest ranger station sight right at the junction of two main highways and there was an ideal sight for that small tract homesite. And we got a fairly decent one or two at around Durango. And then the bad experiences of California were beginning to have with their small tract homesites out in the desert. Then the word got through

JIM: What exactly were those bad experiences?

ANDY: Well, they were bad experiences in that the people went out and threw up tar paper shacks and things like that that just were not conducive to good land use occupancy or management. So, we were fortunate in that respect that we got that work came along soon enough that we didn't get to far into the small tract homesite business that we couldn't extricate ourselves and bail out before we created a bunch of other

JIM: So, you decided to just get out of the business altogether?

ANDY: Yes, the Bureau kind of decided they better get out of the business altogether. And we hadn't, even at the Dillon small tract area which we finally in 1987, I think we patented the last of the parcels into a homeowner's association so that they could use them for plottage or whatever they could salvage from them. But we didn't extricate ourselves from that small tract business until 1987. And they would still like to come back and have us do something, although there's not much we can do. The pattern is pretty well set by the roads and the tract pieces and things like that.

JIM: Now under that Act, you can either or lease or buy.
Correct?

ANDY: Yes, yes.

JIM: Now did you waver one way?

ANDY: Yeah, we did ours almost entirely were lease with option to purchase because we had enough exposure early on that we were dealing with veterans out of World War II who were basically cause they were the first, they were the preference right applicants when any one of these areas ever came up for lease. And, we knew from our own experience, having been through World War II and with families and so forth that the likelihood of being able to maintain a home in say Denver and build a second home or seasonal home, recreation home out in the boondocks was not, you know the probability of that happening was not very high. And so, our first brushes with that convinced us that we better go with lease-option to purchase. And then if they didn't improve their tract, then we could make it available to someone else who would develop it. And this is exactly what happened. They found out that they couldn't make ends meet and they would go out and put up some shanty-type thing that we wouldn't accept for a development, and they would either lose their tract by expiration of the lease or us cancelling it or something like that. And the second go-around, of course, the lands were open, once the tracts had been opened to the veterans then the second go-around if we had an opportunity to lease it again, then we would make it, it could be made available for the general public. And there we had a much broader spectrum of people. We were a couple of years, or three or maybe five years later there too. But these people that came in the drawings and stuff were more, they were more capable of developing, financially capable. They were probably older folks, maybe and some of them took the tracts because they wanted to retire there. And, so they did, in most cases, did a very good job of developing the tracts. They built structures that were large enough to meet our specifications and good workmanship and those factors we were looking for because these had to blend, in some degree, into the county. There wasn't any county zoning or anything usually at that early stage. But to blend in and

harmonize as best we could with what regulations and controls there were. So, we tried to make them so that they wouldn't be totally foreign to that, to what the county was trying to do. And, of course, time made liars out of us in many cases simply because the land use changed, the intensity of the developments changed. And we worked, we had always had, of course, had the authority to do land exchanges.

JIM: Are we going to start land exchanges?

ANDY: Yeah, maybe we better wait.

JIM: Why don't we start that next session?

ANDY: Okay.

JIM: You were going to talk about the schemes that people used to get these small tracts?

ANDY: Yeah. They weren't people weren't content just to go out and file an application. And for a tract of land, I think, I don't know whether the earlier applications required that they have or had visited the land or not. But, at any rate, it became rather popular when you were a non-resident, you lived in New York City and you wanted a small tract out in Nevada or somewhere like that, well you either had an agent go look at the land for you so that you could signify on the form that yes you had inspected the property or some of them. I think maybe one of the requirements in the lease form that they had to have been within a mile of the property. So, some of them would, I think, abuse it to the extreme by flying over the property at a mile above it, something like that. So, there was all kinds of schemes to get properties. It was simple enough to get them by being honest but there was always the crowd that didn't want to be, go about it honestly or they couldn't afford a trip out to Colorado to look at the lands, so they find some other scheme to try defraud the government of 5-acres.

JIM: People tried to get more than on 5-acre?

ANDY: We didn't have too much trouble with it although we didn't have very good, we didn't have good enough records Bureauwide to keep this from happening, of someone getting a small tract in California and also getting one in Colorado.

JIM: Well, what about family members trying to.

ANDY: Yeah, family members, there was a little bit of that went on too. We didn't have any particular problem with that as long as each of them did their improvements, if they build their improvements and stuff, met the law and the stipulations we had in the lease arrangement. Then we didn't. We realized that was going on, but we didn't have a great problem with it. It seemed like it was fair enough. Uncle got his, he got his purchase price, he got his lease rental dollars out of it, and he had substantial compliance with the law and regulations. So, we didn't have a particular problem with that. I don't know what it was like in other states. California may have become a problem with that type of fraudulent stuff going on and probably there was a bit of fraud using names of people that didn't exist.

JIM: Yeah, I would think maybe sometimes you would have a realtor who would want to get 10 sights for himself so he could use a dummy applicant.

ANDY: I don't know that we had. We didn't have that volume of stuff going on in Colorado that what we could have checked it. In California, particularly, it may have been a problem of some of that happening.

JIM: This is a continuation of the oral history interview with Andy Senti conducted by Jim Muhn. The date is September 3, 1992, at the Colorado State Office in Lakewood, Colorado. Okay, Andy, I guess we're going to go on today with the issue of land classification and the work you've done with that over the years, the changes you've seen.

ANDY: When we first worked with the homesteads and public sales and that type of agriculture entries, under the public land laws, we were dealing primarily under the Taylor Grazing Act. And wrote our decisions based on what criteria there were in that Act and what criteria had been developed just through the process of appeals and things like that from prior classifications, most of them associated with rejecting applications that were, for lands that were unsuited for the use for which the application was filed. This involved writing individual decisions on each of these cases that were supported by a field examiner's land report and the appellant process allowed the aggrieved parties of which there were many to take appeals up to the Director of the Bureau of Land Management. So, there was a three-level decision process. The person could appeal from the decision that we issued at the State Office. And take that appeal to the Director of the Bureau of Land Management and what they had was a fairly large unit of folks there that adjudicated these appeals. And for the most part, those appeals sustained the actions of the Bureau field offices. So, there was a fairly large number of appeals then on up to the Secretary of the Interior to get one more shot at changing the decision that the field had made. This, of course, created a large group of employees and backlogs of cases and so the notion came along with much support from the field to shorten this process into a two-step appeal process where the appellant went from the State Offices to the Interior Board of Land Appeals. And that, when the Interior Board of Land Appeals had finished with their adjudication or review that was exhausted the administrative authorities that the appellant had access to and allowed him to take his case then into the federal court system if he wished. In prior, even prior to the passage of the classification of multiple use act, the Bureau introduced a different type of classification process involving first issuance of a proposed classification which was the first proposal that was issued at the field level that said we're going to classify this parcel of land as unsuitable or suitable for use with which you've applied, and that offered them a 30-day period within which to protest. That kept the decision making then at the state level so that we had an opportunity to review the case and change our minds if the person presented information that was persuasive that we had made an incorrect decision. If we got protests, we tried to resolve them or if they couldn't be resolved, we would reject them or dismiss them,

and they had their right of appeal. This was followed by an initial classification decision which was really the final classification decision which either changed the proposed classification decision or sustained it and became the final classification for the particular action involved. This cut down some of the appeals and then when we moved into the classification of multiple use act regulations before this was carried into that process fairly intact. With the passage of the classification and multiple use act in September of 1964, the thrust then became to get as much of our work on a Bureau motion classification process as possible. So that we didn't have to deal with these individual applications and this, as a stage toward that, we went into master units in which we with a lot of help with the field people in the Bureau and also local government and interested parties, we tried to define boundaries of so called best blocked areas of public lands where the predominant ownership was federally owned lands administered by the Bureau of Land Management. And then into the areas that were not so well blocked, where you may have small units of fairly concentrated ownership and then fairly, perhaps equally large units of private ownership. You had a somewhat fragmented land ownership pattern. And then the third category of these were the isolated parcels of land, particularly in eastern Colorado. For instance, we had perhaps 200 acres of parcels scattered over the eastern one-third of the state, and they had long been recognized as not being particularly needed for continued federal ownership. The work that we had done in the Arkansas White Red River Basin study in the 50's had identified these parcels as being suitable for disposal out of federal ownership. The master unit approach was sort of an intermediate approach that we took, and it gradually was modified into the management framework plans that were supported by District analysis of socio-economic conditions in the District and a number of other types of things like that. And then the unit resource analysis which dealt initially with a blinder's approach of just looking at a particular resource whether it be land, minerals, range, forestry, whatever. And drawing lines, overlays on maps of the geographic area of land that we had included in a particular management framework plan, the plan might include a number of planning units that, and most of these planning units had been established under the Taylor Grazing Act very early in the process of implementing the Taylor Grazing Act so that they were more or less logical geographic units for management of the public land. And, of course, when they were formed, the emphasis was basically for livestock production.

That probably had the largest influence in the boundary of those units. While we have had some public involvement with the master units, there was still not all that much public interest in what we did with the public lands. We can recall distinctly when some of the county commissioners says, well just go manage your land, don't bother us with your, with getting us involved in this process. The unit resource analysis and management framework process brought, on a gradual basis, brought county involvement after sometimes quite a bit of persuasion in some counties. Others wanted to be right up front with the planning. And the emergence of interest groups who became very excited to get in this planning free for all brought together in these meetings that we held, public meetings, many different factions, like miners and livestock people, recreationists. Those types of people who had never had much interaction with each other. And, but they worked together reasonably well and helped us immensely with determining boundaries of units and what maybe should be the predominant land use or things maybe that we shouldn't allow to have go on in there. And this provided a very good basis, in my mind, for the considerations that led up to the passage of the Federal Land Policy and Management Act that convinced Congress that we were really sincerely interested in land use planning, and it showed that there was a strong public interest in the planning process. So, all of that carried over nicely into the Federal Land Policy and Management Act. And eventually, the Resource Management Plans which superseded or in the process of superseding the unit resource analysis management framework planning that we had done. Our transition from the management framework plan into the resource management plans then all but eliminated the consideration of individual applications for use or authorization on the public lands at least in terms of land use, land disposal. There was still the provisions under the Federal Land Policy and Management Act and the Mineral Leasing Act of 1920 for pipelines and all other kinds of rights-of-way that had been previously granted under other authorities, particularly the 1891 Act for reservoirs, ditches, and canals and the 1901/1905/1911 rights-of-way authorizations for other types of facilities which were under the Federal Land Policy and Management Act were all covered under one blanket. This simplified granting of rights-of-way and in terms of land disposal, we were then in the driver's seat to a large extent of saying, well, we're interested, we've identified these lands, these isolated parcels of lands have been through the planning process have been identified for disposal out of or transfer of title out of

federal ownership. And, we in that process then, we developed an inventory of public lands that were indeed suitable for title transfer out of federal ownership. And we, for a time, when we had quite a bit of operating money and people and not quite the pressure that we have now for other things, were able to appraise and advertise a number of these small isolated parcels for title transfer and had a fair degree of success with that in getting, got fair market value out of the property, sometimes a little bit of competitive bidding. Insofar as agricultural entries, at least in Colorado experience, we virtually got away from that. The word got around that the homestead act had been repealed by the Federal Land Policy and Management Act and so the inquiries concerning homesteading of public lands dissipated over the 10 years following the passage of the Federal Land Policy and Management Act so that we don't get very many of those anymore. And the economy has not been such that it could absorb any of these isolated parcels of land and our emphasis has gone more toward exchanges of land to again to dispose or transfer title of some of these lands that have been identified for title transfer. But instead of selling them outright and money going directly to the Treasury of getting a return from them through land exchange under Section 206 of the Federal Land Policy and Management Act, nonfederal lands that we had identified in the resource management plan as being desirable and, in some cases, essential to management of the public lands with which they were contiguous. So, much of the emphasis then shifted from sales of the land into land exchanges. And, we have been able to work out some fairly decent land exchanges with that process so that we get title out of the Federal Government in the tracts we don't need anymore and get back in return something that we can use to meet our, the goals like Fish and Wildlife 2000 or Recreation 2000 or Riparian Habitat goals for the 90's. Another facet of land classification that we have been in since the at least the beginning of the master units back in the early 60's, was the identification of potential boundary adjustments that we could make, particularly with the Forest Service. So that they had a better unit of land to manage and by the same token, we often were able to get units of national forest system land that was more easily managed and more coherent with the public lands that it joined that were administered by the Bureau of Land Management. And also, throughout all of this classification process even beginning back in the early 50's, we were able to make adjustments in tenure with the State Land Board. They had, for instance, had lands, school sections, primarily inside Great Sand Dunes

National Monument and Monte Vista National Wildlife Refuge. While we didn't benefit directly from these exchanges of land, the Federal Government benefitted in the long term because of consolidated, the ownerships within these units and we used some of these isolated parcels of lands as trading stock so that we achieved some of our goals. And probably the larger of these exchanges was with the State Land Board to extinguish their title ownership within the Dinosaur National Monument in northwestern Colorado. And, forest boundary adjustments, we were able to affect a good adjustment on the San Juan National Forest so that for both Bureau of Land Management and the Forest Service to accommodate some of their wilderness areas and us to get administration of the, virtually all of the corridor of the Delores River below McFee Dam so that it was under one administrative agency. We were able to the Forest Service lands in Aspen, Colorado, which are not particularly easy to manage by either agency, but they had personnel on the ground at Aspen which made it more practical for them to administer isolated slivers between mining claims than we were able to do. At the Blue River Corridor from Breckenridge down northerly to Green Mountain Reservoir was a very narrow corridor of public land ownership interspersed with private lands that we couldn't manage particularly well but there was adjoining most of these public lands were enlarged bodies of the national forest systems on the Arapahoe National Forest. So that made for a better management over the long term to transfer those lands to Forest Service administration. And particularly the ski areas of Breckenridge and in that area where it made them easier to manage because they did, the people did not have to deal with through separate agencies to get their recreational facilities and ski facilities like that authorized. At Vail, we were able to transfer substantial area there to the national forest system status so that again we had a one-point contact for the using public rather than split contact. And also, they were on scene with offices at Minturn.

JIM: Just so that I have this straight, what period of time is this happening about?

ANDY: This is covering, is spread over from about 1960 onwards.

JIM: Okay.

ANDY: So, it was, and even before 1960, I think, when one of the early things we did when we established the State Office was to look at boundary adjustments with the Forest Service. And we had a number of them, some of which we just discussed were completed and others like up at Leadville was another one that was identified, and it never went anywhere. It gets revived every once in a while, but it's never moved to any conclusion.

JIM: Okay. Going back to classification and multiple use act, you mentioned to me at one time, and I didn't catch it in this conversation, that when it first came out, you were really excited.

ANDY: Yeah, we were very interested in this because it, at least I looked at it as a vindication of the planning efforts that we had done in the past, the philosophies, the things that the managers on the ground had espoused and to the extent that they could implement it. And, so we looked at it as saying, yeah, you did good work. This was Congress' approval of that planning and classification, if you will, that land use ethic that you've developed over this long period of time. It probably went far beyond the beginning of the Taylor Grazing Act even, in part because there were philosophies of managing these public lands long before the Taylor Grazing Act. They started something like the Taylor Grazing Act as early as 1902, back very early. And it took all of that time to graduate into a something, an Act of Congress that everybody can more or less live with.

JIM: Any, I mean, did you have any apprehensions with because of the fact the CMU Act was short-term. I mean it was only supposed to last 4 years.

ANDY: Yeah, I think we probably a bit apprehensive of that, but we went and charged ahead with the classification, of getting the classifications done, of having the public meetings and everything. And then fortunately, we got a 1-or 2-year extension, I think, on it to tidy up on some of the stuff we hadn't gotten to and we never did finish the entire state but

through the major part of it, we had some areas of intermingled ownership that kind of the second category lands where there was, it was just pretty complex to say well, I don't know whether this tract should be disposed of or whether we need to keep it or what to do with it. And there were some of those areas that were kind of, didn't get all the way through the planning process at that stage.

JIM: Did you, well you were talking about these public meetings. At one point, you said that like county commissioners weren't too interested. Now, when you were making that comment, were you talking pretty much about what you were doing under CMU or.

ANDY: I think it started. We probably had some contact meetings. Well, we did have contact meetings with the master units when we were doing that. I think that's, that probably went back to that time. By the time the Classification Multiple-Use Act come along, I think there was a little more local recognition of the need to do planning and the need for public involvement, not just from the standpoint of classifying the public lands but from the standpoint of administering county affairs, zoning, that type of thing.

JIM: Were these people mainly ranchers and miners or were there also some other interests in there?

ANDY: No, I think there was. We tried to get a mix of people. The BLM District folks tried to get involvement of local government folks and as many of the different facets of people that were acquainted with the public lands or should have been acquainted with them. So that they had a, we wanted as big a mix of that input as we could get, to get a good cross-section.

JIM: Okay.

ANDY: And I think there were also public meetings. I'm sure there were public meetings when the Taylor Grazing Act was implemented. The local discussions of do we want to be in a

grazing district, do we want to be outside. So, we were building on that clientele there which at that time, early in the 30's, was basically rancher-type folks, I think. But it's when we got into the 60's, we had graduated a little bit from that and with a little more multiple-use aspect on the part of the public, I think.

JIM: Okay. Well, I'm going to put in a new tape, so we'll end this one right here.

JIM: This is a continuation of the September 3, 1992, interview with Andy Senti. Okay, we were just talking about classification. Let's see, one other question I had. Well, you were talking about agricultural disposals during this particular period of time. Questions I have are (1) when the Bureau under Director Landstrom put on the moratorium relative to agriculture entries and whatever, did Colorado have a fairly big backlog or were you fairly well caught up?

ANDY: I don't believe we had a large backlog. I think much of the backlog was in probably Nevada and California, and probably Idaho with its desert land entries. We had some backlog, undoubtedly, but not the burdensome extent that some of the other states had.

JIM: So, during this period of 60's into the early 70's, people trying to make application under the Homestead Act, or the Desert Land Act were pretty, oh what do I want to say, there wasn't much interest, you didn't have very many applications?

ANDY: It began to dwindle. The word had gotten around that we were allowing them which was sort of a waste of money to file an application and wait. We might not get to it for a year, something like that. So, it was a long, it was money that wasn't available for quite a while and then you had a fairly high certainty that you wouldn't get anything at the end, anyway. You were

JIM: Based on your individual classifications?

ANDY: Yeah, right.

JIM: Right, okay. Well, I suppose we can go on. Those were my questions there. What did you want to move on to? So, we'll go on to withdrawals.

ANDY: Withdrawals have been around for a long time. I guess the first one that you might consider as a withdrawal is the establishment of Yellowstone National Park in 1872 when Congress, of course, did that when they set it aside after a great deal of public pressure to set aside the public lands, get away from this idea that was with the General Land Office and the philosophy of time to get rid of the public domain lands, get them on the tax roles, get the Federal Government out of the business. And, of course, the national forest system lands came into being as the conservation movement accelerated to around 1900. The withdrawals I want to talk about are primarily those outside of the national forest system and perhaps more centered on those large ones like the Bureau of Reclamation and the federal power sites, power site reserves and later the power site classifications. The idea of the withdrawals was fine because it established a cutoff for filing mining claims or other entries under the public land laws which up until at least the classification provisions of the Taylor Grazing Act, you could basically decide you wanted a homestead out on public land and you could go out and do it. The withdrawal, because of that, the withdrawal was necessary if you wanted to build a big reclamation project like Compadre Valley or Grand Valley Projects in western Colorado. So that the land ownership was secure, you had, if it was public land, then you withdrew, and it remained as public land. You didn't have to go the expense of buying the individual lot or providing water or some other amenity that didn't fit in with the project scheme. So, the early withdrawals of this type were Bureau of Reclamation withdrawals and they continued as Bureau of Reclamation, studied the river systems and opportunities for creation of storage reservoirs for irrigation purposes, primarily. Then these withdrawals followed along if the project looked like it had it some degree of feasibility, they would withdraw the public lands from, just simply by asking that they be withdrawn and telling

the General Land Office that they were being withdrawn. This created some problems, not so much in that era up until perhaps the early 40's but after that when the lands became more accessible, shall we say, to multiple use, then it became sometimes a conflict between the withdrawal which maybe is laying there for years without action and other opportunities to use those lands. Maybe perhaps it would be for agriculture use or recreation public purposes or something like that. So, it became important then to look at withdrawals as a management tool and if the withdrawal had served its purpose, the reclamation project had become discontinued or something like that, then this was time for that withdrawal to be revoked. So that other uses or other disposition of the land could be made. The agencies were reasonably good about having these withdrawals revoked when they were no longer being needed or needed for their purposes but there was quite an impetus in, I think about 1958 and 59, to review all of these withdrawals. And we had, Bureau of Land Management, through Section 10 of the Stock Grazing Homestead Act or authorities under the Taylor Grazing Act had withdrawn considerable amounts of land for stock trailing, driveway purposes and we were caught up in this withdrawal review in this 1958-1959 period.

JIM: What prompted that review?

ANDY: It was just a concern that there were too many acres of land withdrawn that somebody couldn't go out and stake a mining claim or something he wanted to do with it or we couldn't dispose of it.

JIM: And this came down from Washington?

ANDY: Yeah, this came from and there was never a Congressional mandate in terms of a special act or anything that said you go do this withdrawal. But there was, and I think it was probably an existence of what is now Section 603 of the Secretary of the Interior Manual that required at least Interior agencies to review their withdrawals periodically and get rid of the ones it didn't need. So, anyway, out of that process, we got rid of a lot of withdrawals. We eliminated virtually all of our stock driveway withdrawals because they weren't being used for stock

driveway purposes anymore in 1959 and we got, may have gotten rid of a few public water reserves. We got cleaned up a lot of Bureau of Reclamation withdrawals and other withdrawals that were not serving any purpose. We made great strides in getting records cleaned and those types of encumbrances which made easier record keeping and just was a good deal all the way around. Earlier and I suppose it had its inception after World War II and probably was instigated by some unfortunate instances of mining claims being located on forest campgrounds or things like that and creating havoc with the recreational aspects of managing the national forest system lands. And so, about the time I started work with the Bureau of Land Management, or at least in the State Office, I moved here in 1954, there was a lot of applications from the Forest Service. We had, we were the agency to process those applications. A lot of applications came to us under authority of Executive Order 10355 that allowed the Secretary of Agriculture to exercise the President's authority to withdraw the public lands or the federal lands. So, these, we had just dozens and dozens of these fairly large withdrawals. They would be in large groups of campgrounds or picnic areas or administrative sites or things that had not been withdrawn before. And so that was a major thrust of our work, oh perhaps up until 58, 59, we processed a lot of those applications. And I think going back later to the or look at what caused this, I think one of the things that did cause it was down at {**Seralonch**} [Sierra Ancha?] Experimental Forest where I had worked a very short time previously. We had fairly elaborate experimental plots laid out to study what happens to water when it falls on land, what kind of vegetation grows and that type of thing. And, there were, of course, the Arizona miners and the federal folks whomever they might be, didn't get along very good with respect to managing the public lands. And I think at one point the Forest Service went out and found mining claims over all these experimental areas and apparently, and I never did get to talk any of the people that I worked with at the experiment station, but I think there was a considerable amount of damage done by the bulldozers and whatnot doing their assessment work and so forth. So that they had since ruined the experimental plots over there. And I think this probably helped a lot to initiate those flood of applications for withdrawal. The Forest Service simply couldn't tolerate their watersheds, experimental areas like Manitou, experimental forest, Frasier Experimental Forest. Those lands being, they had a huge investment there in experimental work and they couldn't, simply couldn't tolerate those being obliterated by someone staking

mining claims and doing and going in and doing work. So, I think that was an incentive, a large incentive for that flood of applications. And many of those applications are still or the withdrawal of public land orders affected those applications finally are still on records because there are still campgrounds, there are still experimental forests or things there that still need to be protected. And so, they did, we didn't have to review these in 1958 or 59. They're in the process or have been reviewed or in process of being reviewed now under the mandate of the Federal Land Policy and Management Act to do withdrawal review.

JIM: You were making the comment that withdrawal reviews since the passage of FLPMA has been a nightmare?

ANDY: Yeah, it's not been effective. It's, we have, I think now we have probably 175,000 acres of lands that that the agencies, the Forest Service, the Bureau of Reclamation, primarily, have said we don't need these withdrawals anymore, but we can't, we BLM, can't get rid of them. Of course, we ran into the problem

JIM: Why can't you get rid of them?

ANDY: We ran in, first of all, we ran into the problem of the environmental concern that was, that kind of grew after Federal Land Policy Management Act came into being and there was concern. We were turning back these lands and when we do that, somebody is going to go out and stake mining claims on them and devastate them. And, of course, this culminated in the lawsuit that was initiated by the National Wildlife Federation against the Department. So, of course, after the dependency of that we weren't able to accomplish anything, any group that we could do withdrawal review didn't accomplish any revocations of getting rid of the withdrawal and we're only beginning to bail out of that a little bit now so we can get. And then we had working on the other side, we had the greatest difficulty of getting new withdrawals. That is slackened off a bit now, but we had the difficulty that the Forest Service might want to withdraw an area for ski, to protect the huge investments of the ski area or something like that. And there was a lot of concern then that

there was still too much acreage of the public lands were withdrawn and not open to this, that, or the other use, particularly mining claim location. And, so it was very difficult for a period of time to get withdrawals or to get new withdrawals and that's where the use of withdrawals as a management tool kind of fell apart. It has to work. You have to have withdrawals; you have to have revocations working together. And then you can use it as a very nice management tool for managing the public land resources and mineral resources too. But, it's difficult to make that work now.

JIM: This is a continuation of the oral history interview with Andy Senti at the Colorado State Office in Lakewood, Colorado, on July 23, 1993, with Jim Muhn, the Historian from the Service Center. The first issue we're going to start with today is cultural resource management before the days that they had archaeologists. Prehistory, right?

ANDY: Yeah.

JIM: So, why don't you start or talk about how BLM and you tried to handle cultural resource matters in that period.

ANDY: There was, I think there's always been an awareness even in the General Land Office of the Anasazi Ruins and culture in southwestern Colorado because of Mesa Verde was discovered early on and the intrusions into that by {**Nordon Strode**} and others sort of focused and I guess brought to pass the antiquities act and throughout the records of the division of field investigations of the General Land Office, there's oftentimes some reference to cultural aspects of the, in the southwestern Colorado, and frequently it shows up in the field notes, even in the very early field notes, maybe as early as the 1880's, there's some reference when the surveyor is going on his surveying line. He goes through an Indian ruin or something, he makes a note of it. So, there's always been an awareness of that and when. I guess the first that I can remember from our public land records and days in the field investigation records were the excavation of the Lowrey Indian Ruin or Lowrey Pueblo

out near, between Dove Creek and Cortez, by the field museum of natural history in the early 1930's. And we have one file out of the division of field investigations that is concerned with that because of they had had protests by the nearby landowners and some near shootings between the landowners and the field museum people and the Park Service folks from the Mesa Verde or other sections of the Park Service that were interested in these ruins. And, as we came into the Bureau of Land Management, as it transitioned in from the General Land Office, the Grazing Service, and the Division of Field Investigations, we had a large backlog of public sales and homesteads and that type of land disposal applications. And, the people, the land examiners, the field specialists that we had at the time, most of them seemed to have some awareness and appreciation for these cultural resources even though we didn't have any full-fledged archaeologists. So, when we would examine a piece of land and find cultural ruins on it, and it was maybe otherwise met the requirements for say homesteading or public sale or something like that, we had an agreement with the National Park Service and so we would contact the Park Service and usually was in Omaha. And I think they had a working agreement with the University of Colorado so that Dr. Joe Ben Wheat usually wound up with making the field investigation or something of the site. So, we would, that would help us evaluate whether the cultural resources were more valuable than the land, the other uses the land might be put to if it went into private ownership. The Lowrey Ruin was obviously was not one site that you pass out of Federal ownership. And then about 1956, we had a sale application by a fellow by the name of Camillo Joseph Torres who filed a public sale application for 40 acres right north, well north of Cortez and west of Delores up on the rim of the Delores River. In the process of looking at that sale application, we found a fairly substantial ruin on it, and we went to the Park Service and finally with Dr. Joe Ben Wheat and they looked at the land and recommended that it not be disposed of. So, we consequently rejected the sale application and Mr. Torres appealed to the Director from the rejection of the application and we were upheld in our refusal to sell the property. Then it laid dormant for a long time. It was still public land and not much done about it and then when we started to work with the Bicentennial just prior to 1975, then a decision was made somewhere along the way that it should be excavated and I think some of this interest was because of the possible involvement with the ruin with the Padre Escalante exploratory trip through southwestern Colorado in 1776 and presumably, he visited this

ruin one morning as they were traveling through this particular area. So, we had a double whammy there. We had the Colorado Centennial and then the 200 years of the Escalante travel. In the process of working with this ruin, we found that it was a very significant site, a very significant location, and had quite a wide span, quite a wide period of occupancy and probably several intermittent no occupancies within that time period. And it was within sight of Lowrey Ruin, in the line of sight, and also in the line of sight of Goodman Point to the west over on the north rim of {**Mc_____ Canyon**} [McElmo Canyon?] west of Cortez. The upshot of all of that work was finally a land exchange and some other small acquisitions to round out the property. And eventually we put the Anasazi Heritage Center on the land that we had refused to sell to Mr. Torres. Now, in the 1950's and so forth and particularly in the mid 1960's, I guess, the Durango Office, which was in a District Office and, I think Dick Kerr was the District Manager there. He had a good appreciation for these cultural resources, and he also had a large and growing problem of vandalism and pot hunting and that type of thing. So, we mounted quite a campaign of helicopter overflights occasionally and other things to deter folks from coming in and pot hunting and otherwise destroying the cultural values in the general area of Cortez and Dove Creek and out to the Utah state line. About that same time, in the mid 60's, I think, we issued a contract to the University of Colorado. This was a fairly crude inventory. They used perhaps a half dozen archeological students during the summertime. So, we got a fairly good inventory, a gross inventory, of the potential sites all through that area from Cortez, Dove Creek, and up in the Utah state line. And I believe Utah was also doing a similar inventory or perhaps had finished it already. And then, about that same time, there was a revived interest in the Lowrey Ruin. It had been backfilled after they finished excavations in the 1930's. Our recreation and public programs became important that we open Lowrey. So, about 1965 or '66, we went in and reexcavated and stabilized the walls and stuff. And then, I believe 1967, we were designated as a national historic landmark. We had a big dedication of it as a landmark and kind of opened it to the public. Had some picnic tables and some fairly good guide explanations written so people could follow through the ruin and find out what was there. Within the southwestern part of Colorado, there had always been interest in oil and gas wells and production. And, probably in the late '70's, they explored enough to find very significant deposits of carbon dioxide and there was a high demand for that in Texas to

transport the carbon dioxide into those fields and use it for {**terchuary**} recovery of oil and gas deposits that they couldn't get out with flooding or other recovery methods. So, this precipitated not only a lot of activity in well sites, but also most of them probably hit good deposits of carbon dioxide so there was a lot of demand to get rights-of-way from the well sites into a gathering system and ultimately in to a large transportation pipeline so that a lot of the management of the resources in that area then were accentuated toward preservation of that cultural resource and consistent with the development of the mineral resource resulting in preparation of environment impact statements. They had a lot of documentation of cultural sites and just an upgraded awareness of the importance of these cultural sites. So far, we've talked mostly about just the Anasazi culture that was fairly restricted into a small area in southwestern Colorado. But, along about 1960, we hired Jules Tileston. He was a recreation planner. I think he had a master's degree in recreation from the Colorado State University. And, just a go-getter, an avid interest in things recreational and things cultural and he photographed, in the short time he was with us, he took over 1,000 photographs of potentially developable recreation sites that we could develop for public campgrounds, things like that that seemed to be kind of the way some people wanted to go at the time. Additionally, he did quite a bit of recordation in a gross sense of the pictographs and petroglyphs and similar type things that were associated with the Fremont culture that was much more poorly defined boundaries but basically scattered at least through western Colorado. So, he helped to enhance our interest and knowledge and concern about those types of sites. And, of course, the District Managers at the time were probably, I suppose all of them were old hands out of the Grazing Service. They had a pretty intimate knowledge of the territories that they were responsible for and so they were able to guide Jules to sites that they knew about. And he simply brought the information into a sort of an inventory, a very crude one as it were, but it was a beginning, at least.

Some of the Anasazi sites were of particular significance, such as Lowrey and Cannonball Mesa and the ruins like that that were reasonably well known because Dr. Fewkes had excavated some of them very many years before. So, in order to afford some protection to those sites we issued, got permission from the Washington Office, and we issued notices of proposed withdrawal for several of those sites so that we could segregate them from

mining claim location and appropriation under the other public land laws. They were finally published as public landowners and they're still in effect, still segregate the land.

JIM: So, now you're going to go on to. Well, let's, as long as you're on the topic, why don't we talk about that natural, national and natural landmarks program.

ANDY: Many of the people that we had in the '60's, late '50's, '60's and a little bit into the '70's, again were professional foresters or geologists, geographers, whatever. They had a good natural science background and so they were interested in unique areas of grass or trees or rocks or things like that. So, we had quite an inventory of these types of sites. They had the High Mesa Grasslands or the Summerville Table down in the Canon City District. And the North Sand Hills in North Park, up around northeast of Walden, Colorado. And rare snake and lizard area down along near McElmo Canyon and right along the Utah border in southwestern Colorado. And, I don't remember the particulars of it, but these sites had been recommended for some kind of withdrawal or special designation. And they happened to be in the Director's office about the time that Stewart Udall left office as Secretary of the Interior. So, before he left, he grabbed quite a bunch of these on a Bureauwide basis, and they turned up in a public landowner. The three sites that I mentioned later became the instant study areas when we went into the wilderness study program. So, they were just, they were unique areas and remain as unique areas. They may not qualify as wilderness, but it serves to show that there was concern all through our organization and all through the time that we had been Bureau of Land Management to recognize these unique natural features. The paleontological features didn't fair really well throughout this process. The **paleo**, it was not, never did really have a really good home, or an organization. It was in minerals for a while and then it was in recreation and back and forth. But we did, we were aware of significant **paleo** sites. We knew about the Garden Park fossil area in Canon City and some areas along the San Miguel River downstream from Telluride and some **ammonite paleo** sites over at Kremmling. Those areas like that and we never really did very much with those. We, a couple of them, we did segregate for a time under Recreation Public Purposes Act to put some segregation on them so they wouldn't become appropriated by

mining claims or other types of entries. And, out west of Grand Junction, there was a particularly interesting area of very old and very small fossil. I don't remember much of the details. We called it the Fruita paleontological area. And we did succeed in getting that withdrawn as a public land order with the idea of preserving that for against fossil collection by the general public, so it's set aside so that Universities and whatever can come in and do technical excavation and research in the area. The Section 603, Federal Land Policy and Management Act of 1976 directed the Bureau of Land Management to inventory its, all of its lands for potential wilderness values. And, this was an outgrowth of a lot of concern by resource managers. Probably, even back into the early 50's and certainly in the 60's. And, we had identified a number of sites that kind of looking at the Forest Service program of wilderness, or a primitive areas perhaps more properly proceeding 1964, that we thought had unique characteristics of maybe roadless and just prime natural areas that hadn't been deteriorated by any appreciable amount of lands activities, so we kept track of these areas when we were adjudicating oil and gas, leasing, and that type of thing. And so they fell in nicely with inventory after the wilderness section of FLPMA was put upon us to inventory all of those sites. A great amount of time was spent with wilderness inventory to do a thorough job of inventorying all of the lands. And considering all of the areas that were in excess of 5,000 acres that appeared at first glance to be roadless and thereby potentially qualifying for wilderness designation. While I didn't have any direct involvement with the wilderness, we were a very small group of four or five people, I guess, working very closely in one small area in the State Office. So, we just, we simply interchanged information and I worked a lot with the, helping with oil and gas leases, identification of oil and gas leases that might be within these potential wilderness areas and helping the folks sort those out because they didn't have much experience with oil and gas leases. So, that was my involvement with that. And, of course, keeping track of these different areas on maps or whatever so that the other things that we did in realty or whatever we were aware of the boundaries of those potential study areas.

JIM: We were just talking about public land records off the mike and just to be kind of bring, you were talking that you look at public land records differently than perhaps I would since I look at it from more of historical perspective. And you

were making the comment that you think that actually these records may be the most valuable cultural resource that the agency has. Why don't you expand on that.

ANDY: Okay. The automated systems that we're going into are fine for carrying into the future for our day-to-day work, our adjudication of mineral leasing and all of that type of thing where you want accurate statistical data, and it doesn't have in it a great deal of the human factor. And, for that reason, I think we need to look at the old public land records, the tract books, the local land office plat books, the serial register pages, the name indexes, that type of thing. I think we have to look at those even though they don't help us tremendously with our day-to-day money-making aspects of our responsibility. But they are of almost immeasurable value in terms of a cultural or historical sense. And I think the American people are, as they have more leisure time to inquire to where their ancestors came from and what they did and that type of thing will depend heavily upon these public land records as sources of information, particularly in the western United States because those records are usually about the first events other than the trappers and early guides that worked throughout the western United States. They are about the first good written record of what was going on, the types of people, the nationalities, and all of that, the ages, the age groups of people that were involved in settling the West. Because of our proximity to the Rocky Mountain region of the National Archives at the Federal Center, we have probably a larger interface with them than most of the western states do and so we become aware of the tremendous amount of people who come into their office either looking just for a family history, not necessarily in a genealogical sense, but just curiosity about their ancestors and what they did, where they came from, that type of thing. And the need for that type of information outside of the Bureau, the Census Records, and that type of thing, the public land records, the tract books that the Washington Office kept, and the counterpart tract books that the local land offices kept and the plat books that the local land offices kept, which we kept until about 1965 when the records improvement project of that period was installed. The automated records will probably never answer some of questions that there are answers for in these old written records such as the date that the entryman filed his first papers with the local land office. And, sometimes that's very important because the homesteader usually had 5 years to

prove up, to get his land titled, patented. And the backlog of work in the General Land Office in the 1870's and '80's and '90's was very significant. It might be 2 or 3 years before they got around issue a patent after the local land office had issued a final certificate telling the entryman that he could have a patent. So, the, for our records, perhaps we care only that, you know, when the patent was issued but if the researcher is looking for to find out, confirm that this particular person he was researching was indeed in the area at some earlier period, then the tract books have that first date that he contacted the local land office which may be 5, could be as many as 10 years before the patent. So, that person who is looking at that, doing that research, looks in the tract book or in the case file if he goes into the National Archives and finds when that person first really was in that area. And, for the critical people, and they're looking for very specific dates and want to make a point, that's at least satisfying to them to have these types of records available. We used these records almost on a daily basis to resolve problems of land description or other title questions that come up and I think that this will always prevail, that you will have to go back to those old written records to find out sometimes or try to figure out what happened, why something is the way it is today. Along that vein, there has been a gradual loss of knowledge about these records. We have a fairly busy schedule just responding to day-to-day inquiries that we can answer from the existing automated records or from the master title plats and historical indexes. And so we've lost the historical knowledge in some cases even the knowledge that these records exist. And, in some cases, a resistance to using these records even though they may know that the exist, they're somewhat tedious to use sometimes and may be on roll film, microfilm, rather than handy microfiche. And, gradually over a long period of time we've lost that historical knowledge and somehow, we need to bring that, have a cadre of people scattered throughout the Bureau that will continue that knowledge and be able to respond to the general public that comes in because these are, these records do belong to the general public and we're the custodian and we probably should service what we sell. We should probably be able to explain those records to the person who comes in tomorrow, the person who comes 100 years or 200 years from now is entitled to know, to be able to talk to someone who is knowledgeable about what's in those records. I think most agencies, resource management agencies, I think are finding that these old records are valuable things that they're doing now. For instance, the

Forest Service in their water adjudication processes have to rely on these old records to find when people began entering a particular area of the national forest system. And, we find these old records to be highly valuable in establishing whether there was public access, perhaps, some roads that were maybe could be proven to have had revised statutes, 2477 status, or they were roads that were used by homesteaders and other settlers and so, we, in a recent case, we've used this effectively to persuade the opposition, at least, with nothing more than sheer volume of papers that we meant business, that we were looking at these old records and bringing them as exhibits into the court. And this probably is going to have to happen over and over again as we work to demonstrate that indeed there is and has been public access to a particular area of public lands for a long, long while. In the private sector, oftentimes, talks with us about these old records because that's really the, oftentimes, the only resort they have to show that yes, indeed, there was a right-of-way road that was common usage, that provided access to their properties. And there's an element in our society now that buys lands and cuts off access to private lands or to, perhaps, to the public lands. And, so they, sometimes the parties have to resort to litigation, and they have to go back to these records. The old public land records, to help identify their rights and, perhaps, win their case. The public land records and particularly the Washington Office tract books, have a very good record of all the railroad rights-of-way that have been granted across the public lands by the Department of the Interior from this special act of 1862 and 1864 and others and then, of course, the major railroad right-of-way authority which was the March 1875 Act. And, I think most states probably have the second {**linding**} tracing of these rights-of-way grants.

JIM: No, no keep going.

ANDY: Okay. Perhaps, at least Colorado has preserved most of its {**linding**} tracing of these. And, they have, aside from their legal rights and things like that, they're also historical in that they have the little towns, little mining camps, whatever, that that railroad might have gone through. That may be, that railroad right-of-way map may be one of the few records that we have of a particular little mining camp that might have existing for a year or 2 years, something like that. The

railroads were supposed, well they got their grant, let's say they got a grant in 1882. They were supposed to come forward with the proof of construction within 5 years or the grant was in danger of forfeiture. It doesn't appear that the General Land Office did anything about enforcing this provision of the law simply because they probably didn't have people to do it. And it probably became somewhat of a problem in maybe before, a little bit before 1900, but at least in 1906, the Congress passed an act of, railroad forfeiture act, which sort of solidified things a bit. And said if they didn't have their construction done, they were subject to forfeiture. And then they repeated this in a slightly different mode in 1909. Still, the General Land Office did not do very much about this with respect to the hundreds of segments of railroad that had been constructed or at least authorized but maybe never a spadeful of dirt was ever moved. So, about 1924, 25, and 26, the, apparently, either the field, Division of Field Investigations, or someone else in the Department, at least, did a detailed review of each of these railroad right-of-way grants, and I think most of them were actually field investigations and probably by the Division of Field Investigations of the General Land Office. But, as a result of that, there were a great many of these railroads, some had been built and abandoned in that fairly long period between the time they were granted in the late 1800's up until 1925, and then there were a great many that had never been constructed at all. But the end result was that, as a result of these investigations, these abandoned or never constructed rights-of-way were forfeited under the 1906 or the 1909 Act. And, so they could, so they weren't causing problems for other land uses at least in the records sense. They could be taken from the records. However, when they did the records improvement project in 1965, at least in Colorado, they had taken all these railroad rights-of-way which had been kept by the various local land offices in an alphabetical series so that all of Denver Rio Grande railroads were in, were under D, and Santa Fe was under S, and so forth like that. And, of course, that file in itself was sort of a historical file that they did a fairly decent job of collecting all of these different railroad rights-of-way under say Denver Rio Grande and then serialized all of those so that all of the Denver Rio Grande are in the series of serial numbers, and they did the same with the other companies. And they didn't take the time in 1965 to adjudicate these rights-of-way and find out the ones that had been forfeited or declared void and abandoned in the 1920's. So, as a result, most of them turned up on the master title

plats and they were properly put in historical index because they were a right at one time. But they did put them on the master title plats and so we have spent a great amount of time since then finding the documents that forfeited them or abandoned them or whatever so that we could take them off the master title plats because they're misleading as to the information. You look across the master title plat, and you see a railroad right-of-way there and you look on the topographic maps and there's no railroad. And you get into problems then with mineral leasing, oil and gas leasing under the 1920 Act. If you've got a railroad right-of-way across the property, you can't lease that particular land within the railroad right-of-way under the 1920 Act. You have to go with the 1930 Mineral Leasing Act. So, we've made a diligent effort to get those void and abandoned railroad removed from master title plats, so they don't become a encumbrance for oil and gas lease adjudication.

A little bit on oil shale since it was, has been an on-going problem since the mid-teens, or perhaps even earlier in northwestern Colorado. In Colorado, the oil shale lands are predominately in the Piceance Basin. There's a stringer that comes down out of Wyoming into called the Sand Wash Basin that's in the extreme northwestern Colorado and then a little bit more that spilled over from Utah, along the Colorado/Utah border just west of Rangely. The major part of the activity has been in the Piceance Basin. People became aware of this existence of oil shale beds probably in the early and maybe in the 1880's and 90's and certainly after the turn of the century. When they became well known, there was no provision for locating them and the only thing that people could do was to take out oil shale placers under the general mining law. And so, they essentially blanketed the Piceance Basin with oil shale claims, particularly on the southern and western exposures of it. I don't think they realized at the time that the deepest and richest beds of the oil shale were at the center of the basin along Piceance Creek because they were many thousands of feet of overburdened. There were no outcrops of oil shale bearing strata. And so they had to stake their claims where there were outcrops, usually of the oil shale, so that they could do their discovery work and things like that. Many of these areas were blanketed with oil shale claims, well, I guess, all of them in the teens or earlier. And, but there was early enough concern on the part of geologists, of federal geologists and so forth, in the U.S. Geological Survey and probably in, perhaps, the Bureau of Mines that they set aside the naval oil shale reserves numbers 1 and 3

which again didn't get into the heart of the deep oil shale deposits within the center of the Piceance Basin. But, at least, they covered a significant area of the oil shale and set that aside so that people couldn't go in and stake claims on it. So, these, so in 1916 and then later in 1924, there were extensive areas withdrawn for oil shale or classified for oil shale. And then in 1930, the Executive Order 5327 of April 30, 1930, set aside pending classification of all of the oil shale resources in Colorado. The Mineral Leasing Act of 1920 removed oil shale from locatable minerals so there was no opportunity after 1920 to locate oil shale placer claims under the general mining laws. There was lots of speculation and fraudulent developments and fraud generally involved with oil shale because no one had yet come up with an economical process for extracting its hydrocarbon content. But, nevertheless, there were these people who had staked the oil shale placer claims which usually amounted to 160 acres staked by called association placers, they were eight people signed the location certificate and so each was entitled to 20 acres under the general mining law. And these then, they began to file applications for patents for these lands. And, when they did that, the General Land Office had its Division of Field Investigations which were folks with mining engineers, geologists, that type of person, examine these lands to see if they indeed had qualified under the general mining laws. They had their discovery of valuable minerals. They had done their assessment work and the other things that were required to perfect a mining claim. And so, there was a large cadre of people that worked in the Piceance Basin to process these mineral patent applications. And, in the course of examining these claims and the credentials of the parties that were involved with the claims, many of the claims were found to be fraudulently located by dummy locators or they had not done their assessment work or a number of things like that that disqualified them for mineral patents so there was a great body of litigation arose from these investigations. And some of the entries went on to patent. They had their discoveries and otherwise met the minimal requirements of the mining law. Others were rejected. This went on into the early 30's and then there was, because of the Depression probably and loss of interest in the feeling that we may never have an economically viable process for extracting the hydrocarbons from the oil shale, everything kind of died down through the 30's and then through World War II. But after World War II, there was a revival of interest in the mineral patent applications and there was also a revival in the interest in whether these people had

indeed properly qualified their claims with assessment work and valid discovery and all of that. So, a few of the claims went on through the patent. And then, we became more concerned with the rules of discovery and economics of oil shale. It became rather rare to issue a patent for oil shale claims. And then there was a long period from the late 1950's on up through the oil shale settlement agreement in 1987 in which virtually all of the claims that were still being maintained by the owners and most of the owners were large mineral companies. But this litigation just went on and on so that we didn't issue any patents for oil shale claims. We went through contests on validity. We had our mining engineers made intensive investigations, drilled the sites that were supposed to be the discovery point, took samples. The Bureau, I think it was the Bureau of Mines in Wyoming assayed the samples, found out whether, how many gallons per ton of usable hydrocarbons they could get from a ton of oil shale. But none of this really resolve the problems of the old oil shale claims. And these were finally after many court cases and litigation, these were finally settled or adjudicated in a settlement agreement among the mining claim owners and the Department of the Interior and the Department of Justice so that the, about 70,000 acres of surface with mineral rights went to the private sector and then another 10,000 to 12,000 acres of which the surface had already been patented, perhaps under stock grazing homestead or other acts, but the minerals were still United States. But anyway, under these 12,000 acres then the company under the settlement agreement got title to the mineral rights. Simultaneously, with conveyance of the, with issuance of the patents, the settlement agreement required that the owners, that these patentees reconvey to the United States the oil, gas, and coal rights below the orange marker. And that was in the geologic strata that prevails throughout the basin so that the oil shale patentees then got title to the oil shale and to the surface. The United States got title to the oil and gas and coal reserve under those lands.

Aerial photographs played a major role in resource management after they became available, the first flights of any general availability were in 1937, 1938 over most of western Colorado. Up until that time, for most areas, the Grazing Service did not have good maps or very few areas had been mapped by the U.S. Geological Survey topographic mapping series. So, the aerial photographs became a valuable source of information for mapping purposes. This occurred at a time when we still had agencies

that were created out of the great Depression of the 30's, works progress administration were the ones. They, I believe, participated in constructing from these aerial photographs constructing semi-controlled aerial mosaics that covered 2 inches to the mile. It covered 15 minutes of latitude and longitude. In the Grazing Service when it had started in 1934 didn't have anything to work with in the way of maps except the General Land Office survey plats. Some of those were good. Most of them were not very good in terms of drainages and mountains, hills, and valleys. So, they, but they had a fairly substantial map plant in Grand Junction, and they had prepared maps as best they could from the information at hand for their grazing districts. When the aerial photographs became available, then this became a very valuable source of information, and they spent a lot of effort in putting the survey, township and section lines and things on these semi-controlled mosaics and those were the best maps that we had to use until they were supplanted by the standard U.S. Geological Survey maps which last areas weren't finished until the late 70's. We had a long period there when those mosaics or newer aerial photography that the Commodity Stabilization Service or later the Agricultural Stabilization Service or the Forest Service or the Soil Conservation Service or the U.S. Geological Survey had flown for their mapping program. So, today, we don't use the aerial photography nearly so much as we did before. But, the resource manager, the guy on the ground, oftentimes had a file of aerial photographs right in his pickup with him. If he had a little tin box, if he was going out to a grazing unit or something, he had that tin box with the photos that covered that area and if he was a conscientious resource manager or whatever, he probably found some section corners and things like that. He put those on the mosaic or the contact aerial photographs or whatever and so that preserved a lot of information about where those corners were. We have the vegetative type lines. They drew those on the photographs and their range inventories and the fences, all that type of things. So, those aerial photographs are very valuable historical document for finding survey corners and for defining whether they were roads or trails in existence at the time. So, these come into play now. We go back to those old photographs or mosaics or subsequent individual flights to find survey corners or for our geographic coordinate data base system or we could use them with the geographic GPS, global positioning system. But they would be useful to recover corners there, and also, we like to use them when we're adjudicating roads that we think may

have had long public status. We may go back to those old photographs to see if there were roads in evidence in 1937 or 1939 or 52 or whatever the photographs covered the area. That's good for that.

JIM: Well, that's either just about it.

ANDY: From a realty standpoint in our dealings with other agencies, we would often have parcels of land that someone wanted to homestead or wanted to have a desert entry on or a public sale, something like that, these properties would be adjoining national forest system land, we would try to contact the Forest District Ranger and see if this would impinge heavily on the forest if we did this. Did he need to have road rights-of-way reserved across the land to get to the national forest, that type of thing. And we also initiated exchange of information about land ownership so that the national system forest system maps, they had a good set of national forest system maps that they used for their recreational public who wanted to use the national forest system lands for recreation. But they didn't have on them the adjoining public lands, the distribution of the other public lands within say Jackson County which was surrounded by national forest system lands and part that was outside the forest was blank with respect to land ownership. So, we worked with the Forest Service closely to provide them information for their maps so that the early maps probably in the mid-60's, I guess, began to do this so that we got, like on the Route National Forest, then we got the national forest system lands. We got the BLM lands that were out in the middle of the North Park. That, I guess, began, was kind of the beginnings of our later 1/2-inch mile land ownership maps that showed that they were land management prepared and published. And, then the subsequent maps, the 100,000 scale maps that we use now, it just broke the ice between the two agencies in respect to showing each other land ownership. Of course, the public was a benefactor, the agencies were benefactors, too, because they could see the relationship of the respective lands that they administered and they could see if you did something on this blob of yellow land that was BLM, did it impact adversely something that Forest Service was doing on their property.